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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/061,813	01/31/2002	James Armand Baldwin	MSI-1011US	1857
22801	7590	10/19/2005	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			GILLIS, BRIAN J	
			ART UNIT	PAPER NUMBER
			2141	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/061,813	BALDWIN ET AL.	
	Examiner	Art Unit	
	Brian J. Gillis	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2002 and 28 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 12 and 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez et al (US PG PUB US2002/0059623) in view of Byrne et al (US Patent #5,990,883).

Claim 1 discloses a method comprising: storing program data for an electronic program guide (EPG) in multiple tables, each table comprising one or more records with one or more fields and at least two said tables are related such that one said record in one said table indexes another said record in another said table; and sorting the records in the tables according to a selected field type prior to delivery of the program data to a remote client. Rodriguez et al teaches of storing program data for an EPG in a digital broadband delivery system (DBDS), presenting program data in a channel-time grid which contains multiple records, multiple sets of tables which contains multiple data fields, and each table corresponding to its respective channel in the channel line-up (paragraphs 21, 32, 73, 91, 93, 116, and 117). It fails to teach of the tables being related such that one record in a table indexes another record in another table. Byrne et al teaches of an EPG, which uses a relational database schema, which allows data from separate tables to be related to each other (column 6, lines 15-50).

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Rodriguez et al and Byrne et al are analogous art because they are both related to electronic program guides.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the relational database schema in Byrne et al with the system in Rodriguez et al because flexibility to respond to changes such as additional data and efficiency in allowing rapid display, searching, and other controls are provided (column 6, lines 15-24).

Claim 2 discloses a method as recited in claim 1, wherein the tables comprise a particular structure and the sorting rearranges the records without changing the particular structure. Rodriguez et al further teaches of multiple sets of tables which contains multiple data fields, each table corresponding to its respective channel in the channel line-up and corresponding to a subsequently contiguous fifteen minute increments of time, therefore, these tables comprise a structure, and the sorting operation on the EPG data rearranges the records without changing the particular structure (paragraphs 73, 91, 116, 117, figure 5).

Claim 3 discloses a method as recited in claim 1, wherein the selected field type is selected from a group of fields including actor names, program genre, title, and ratings. Rodriguez et al teaches a method wherein the selected field type is selected from a group of fields including actor names, program genre, title, and ratings (paragraphs 73 and 91).

Claim 4 discloses a method as recited in claim 1, wherein the records comprise program records containing programming information, individual program records

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having a title field to identify a program name, and the sorting comprises arranging the program records in the tables according to a stopped name version of the program name in the title field. Rodriguez et al further teaches of individual program records having a title field to identify a program name and sorting comprising of arranging the records according to a stopped name version of the program name in the title field which is kept (paragraphs 73 and 91).

Claim 5 discloses a method as recited in claim 1, further comprising constructing a data file to hold the sorted tables. Rodriguez et al further teaches of an EPG database, which is a data file to hold the sorted tables (paragraphs 90, 91, 116, and 117).

Claim 6 discloses a method as recited in claim 5, further comprising delivering the data file to the remote client. Rodriguez et al further teaches the EPG is delivered to a remote client (paragraphs 21, 32, and 73).

Claim 7 discloses a method as recited in claim 5, wherein the storing, the sorting, and the constructing are repeated for each day of program data. Rodriguez et al further teaches of maintaining the database at a variety of intervals including daily (paragraphs 91 and 110).

Claim 8 discloses a method for delivering program data for an electronic program guide executing at a remote client, the method comprising: storing program data for an electronic program guide in multiple tables, the tables comprising one or more program tables with records of programming information, the program tables having a title field for program titles, and one said record in one said table indexes another said record in

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another said table; sorting the records in the program tables according to the title field; and constructing a data file to hold the tables. Rodriguez et al teaches of storing program data for an EPG in a digital broadband delivery system (DBDS), presenting program data in a channel-time grid which contains multiple records, multiple sets of tables which contains multiple data fields, and each table corresponding to its respective channel in the channel line-up, and of an EPG database which is a data file to hold the sorted tables (paragraphs 21, 32, 73, 90, 91, 93, 116, and 117). It fails to teach of the tables being related such that one record in a table indexes another record in another table. Byrne et al teaches of an EPG, which uses a relational database schema, which allows data from separate tables to be related to each other (column 6, lines 15-50).

Rodriguez et al and Byrne et al are analogous art because they are both related to electronic program guides.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the relational database schema in Byrne et al with the system in Rodriguez et al because flexibility to respond to changes such as additional data and efficiency in allowing rapid display, searching, and other controls are provided (column 6, lines 15-24).

Claim 9 discloses a method as recited in claim 8, wherein the sorting comprises arranging the records according to stopped name versions of program names in the title field. Rodriguez et al further teaches of individual program records having a title field to identify a program name and sorting comprising of arranging the records according to a

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stopped name version of the program name in the title field which is kept (paragraphs 73 and 91).

Claim 10 discloses a method as recited in claim 8, further comprising delivering the data file to the remote client. Rodriguez et al further teaches the EPG is delivered to a remote client (paragraphs 21, 32, and 73).

Claim 12 discloses a method as recited in claim 8, wherein the storing, the sorting, and the constructing are repeated for each day of program data. Rodriguez et al further teaches of maintaining the database at a variety of intervals including daily (paragraphs 91 and 110).

Claim 17 discloses a computer system, comprising: a memory; a processor coupled to the memory; and a data sorter program stored in memory and executed on the processor to sort electronic program guide (EPG) data according to a data type into records arranged in multiple tables, at least two said tables are related such that one said record in one said table indexes another said record in another said table prior to delivery of the EPG data to a remote client. Rodriguez et al teaches of a memory, a processor couple to the memory, and a data sorter stored in memory (paragraphs 21, 32, 59, 61, and 91). It fails to teach of the tables being related such that one record in a table indexes another record in another table. Byrne et al teaches of an EPG, which uses a relational database schema, which allows data from separate tables to be related to each other (column 6, lines 15-50).

Rodriguez et al and Byrne et al are analogous art because they are both related to electronic program guides.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the relational database schema in Byrne et al with the system in Rodriguez et al because flexibility to respond to changes such as additional data and efficiency in allowing rapid display, searching, and other controls are provided (column 6, lines 15-24).

Claim 18 discloses a computer system as recited in claim 17, wherein the data type is a program title, and the data sorter program is configured to sort the EPG data according to a stopped name version of the program title. Rodriguez et al further teaches of individual program records having a title field to identify a program name and sorting comprising of arranging the records according to a stopped name version of the program name in the title field which is kept (paragraphs 73 and 91).

Claim 19 discloses a computer system as recited in claim 17, wherein there is EPG data for multiple days, and the data sorter program is configured to sort the EPG data separately for each day. Rodriguez et al further teaches of sorting the database at a variety of intervals including daily (paragraphs 91 and 110).

Claim 20 discloses a processing system, comprising: sorting means for sorting program data for an electronic program guide according to a data type that a viewer is likely to search, wherein the program data is sorted into multiple tables, at least one said table includes a record that indexes a record in another said table; and transmission means for transmitting the sorted program data to the client. Rodriguez et al teaches of sorting program data for an EPG according to a field a viewer is likely to search and transmitting the data to a client (paragraphs 21, 32, 91, and 97). It fails to

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teach of the tables being related such that one record in a table indexes another record in another table. Byrne et al teaches of an EPG, which uses a relational database schema, which allows data from separate tables to be related to each other (column 6, lines 15-50).

Rodriguez et al and Byrne et al are analogous art because they are both related to electronic program guides.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the relational database schema in Byrne et al with the system in Rodriguez et al because flexibility to respond to changes such as additional data and efficiency in allowing rapid display, searching, and other controls are provided (column 6, lines 15-24).

Claim 21 discloses a processing system as recited in claim 20, wherein the sorting means sorts the program data according to stopped names of program titles. Rodriguez et al further teaches sorting comprising of arranging the records according to a stopped name version of the program name in the title field, which is kept (paragraphs 73 and 91).

Claim 22 discloses a television entertainment system, comprising: multiple clients to receive television signals and corresponding program data for an electronic program guide (EPG), individual clients having a search engine to search the program data; and an EPG server to sort the program data prior to delivery to the client, the program data being sorted according to a selected parameter to place the program data in a sorted arrangement to facilitate searching at the client, wherein the sorted arrangement

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includes a record for the selected parameter that indexes another record for another parameter. Rodriguez et al teaches of multiple clients receiving television signals and an EPG, and an EPG server to sort the program data prior to delivery to client (paragraphs 21, 32, 63, and 91). It fails to teach of the tables being related such that one record in a table indexes another record in another table. Byrne et al teaches of an EPG, which uses a relational database schema, which allows data from separate tables to be related to each other (column 6, lines 15-50).

Rodriguez et al and Byrne et al are analogous art because they are both related to electronic program guides.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the relational database schema in Byrne et al with the system in Rodriguez et al because flexibility to respond to changes such as additional data and efficiency in allowing rapid display, searching, and other controls are provided (column 6, lines 15-24).

Claim 23 discloses a television entertainment system as recited in claim 22, wherein the EPG server sorts the program data according to program title. Rodriguez et al further teaches of sorting the program data according to a program title (paragraphs 73 and 91).

Claim 24 discloses a television entertainment system as recited in claim 22, wherein the EPG server sorts the program data according to stopped name versions of program titles. Rodriguez et al further teaches of individual program records having a title field to identify a program name and sorting comprising of arranging the records

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according to a stopped name version of the program name in the title field which is kept (paragraphs 73 and 91).

Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez et al (US PG PUB US2002/0059623).

Claim 14 discloses a computer-readable medium comprising computer-executable instructions that, when executed, direct a computing system to: sort program data for an electronic program guide according to stopped names of program titles; and store the program data in a data structure for delivery to a remote client. Rodriguez et al teaches of sorting program data according to the title name in the title field and storing the program data in an EPG database for delivery to a remote client (paragraphs 21, 32, 73, 90, and 91). It fails to teach of sorting the name in the title field as a form of a stopped name version. The stopped name version of the program name can be interpreted as a version of the title stored in memory available based on display limitations. At the time of the invention it would have been obvious to a person of ordinary skill in the art to sort the records according to the name in the title field in order to coalesce program data sets into one and to organize it into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

Claim 15 discloses a computer-readable medium as recited in claim 14, further comprising computer-executable instructions that, when executed, direct a computing system to deliver the data structure to the remote client. Rodriguez et al further teaches the EPG is delivered to a remote client (paragraphs 21, 32, 68, 73, and 122).

Claim 16 discloses a data structure stored on a computer-readable medium, comprising: multiple tables to store program data for use in an electronic program guide; the tables comprising program tables composed of records with programming information, the program tables having a title field to hold program titles; and the records of the program tables being sorted by stopped name versions of the program titles. Rodriguez et al teaches of storing program data for an EPG in a digital broadband delivery system (DBDS), presenting program data in a channel-time grid which contains multiple records, multiple sets of tables which contains multiple data fields, and each table corresponding to its respective channel in the channel line-up (paragraphs 21, 32, 73, 91, 93, 116, and 117). Rodriguez et al further teaches of sorting program data according to the title name in the title field and storing the program data in an EPG database for delivery to a remote client (paragraphs 21, 32, 73, 90, and 91). It fails to teach of sorting the name in the title field as a form of a stopped name version. The stopped name version of the program name can be interpreted as a version of the title stored in memory available based on display limitations. At the time of the invention it would have been obvious to a person of ordinary skill in the art to sort the records according to the name in the title field in order to coalesce program data sets into one and to organize it into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez et al (US PG PUB US2002/0059623) in view of Byrne et al (US Patent

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#5,990,883) as applied to claims 10 and 22 above, and further in view of Beach et al (US PG PUB US2003/0014753).

Claims 11 and 25 disclose a method and television system as recited in claims 10 and 22, further comprising searching, at the client, the program records using a binary search. Rodriguez et al in view of Byrne et al teaches of the limitations of claims 10 and 22 as recited above. It fails to teach of using a binary search. Beach et al teaches of using a binary search (paragraphs 49 and 53).

Rodriguez et al in view of Byrne et al and Beach et al are analogous art because they are both related to electronic program guides.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the binary search in Beach et al with the system of Rodriguez et al in view of Byrne et al because an interactive program guide that provides the viewer more flexible search options.

Claims 13 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez et al (US PG PUB US2002/0059623) in view of Byrne et al (US Patent #5,990,883) as applied to claims 12 and 22 above, and further in view of Etheredge (US Patent #6,018,372).

Claim 13 discloses a method as recited in claim 12, further comprising: delivering the data files to the remote client; and searching, at the client, the program records in each of the data files for each day of program data to produce temporary results from each of the data files and subsequently searching the temporary results. Rodriguez et al in view of Byrne et al teaches of the limitations of claim 12 as recited above. It fails to

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teach of producing and searching through temporary results. Etheredge teaches the client performs a second search involving the results produced from the first search (column 8, lines 20-35).

Rodriguez et al in view of Byrne et al and Etheredge are analogous art because they are both related to electronic program guides.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the client performing a second search based on results from the first in Etheredge with the system in Rodriguez et al in view of Byrne et al because a viewer is able to access programming information relevant to the viewer interest while reducing the amount of data the user must view.

Claim 26 discloses a television entertainment system as recited in claim 22, wherein the program data covers multiple days, and the EPG server is configured to sort the program data for each day separately from other days, and individual clients are configured to perform a two-phase search in which a first phase involves a search of the program data for each day and a second phase involves a search of results produced from the first phase. Rodriguez et al in view of Byrne et al teaches of the limitations of claim 22 as recited above. It fails to teach of producing and searching through temporary results. Etheredge teaches the client performs a second search involving the results produced from the first search (column 8, lines 20-35).

Rodriguez et al in view of Byrne et al and Etheredge are analogous art because they are both related to electronic program guides.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the client performing a second search based on results from the first in Etheredge with the system in Rodriguez et al in view of Byrne et al because a viewer is able to access programming information relevant to the viewer interest while reducing the amount of data the user must view.

Response to Arguments

Applicant's arguments filed on June 28, 2005 have been fully considered but they are not persuasive.

Applicant asserts Rodriguez et al does not teach or suggest, "stopped names of program titles". Examiner respectfully disagrees, Rodriguez et al teaches of storing the title along with multiple versions of each program's title, short description, or other program attributes and used based on space available for display (paragraphs 73 and 91).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dobbelaar (WIPO WO 00/48395) teaches of displaying an electronic program guide.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Gillis whose telephone number is 571-272-7952. The examiner can normally be reached on M-F 7:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharra can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian J Gillis
Examiner
Art Unit 2141

BJG


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER